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above ground storage tank  
air quality  
asbestos/lead-based paint  
baseline environmental assessment  
brownfield redevelopment  
building/infrastructure restoration  
caisson/piles  
coatings  
concrete  
construction materials services  
corrosion  
dewatering  
drilling  
due care analysis  
earth retention system  
environmental compliance  
environmental site assessment  
facility asset management  
failure analyses  
forensic engineering  
foundation engineering  
geodynamic/vibration  
geophysical survey  
geosynthetic  
greyfield redevelopment  
ground modification  
hydrogeologic evaluation  
industrial hygiene  
indoor air quality/mold  
instrumentation  
masonry/stone  
metals  
nondestructive testing  
pavement evaluation/design  
property condition assessment  
regulatory compliance  
remediation  
risk assessment  
roof system management  
sealants/waterproofing  
settlement analysis  
slope stability  
storm water management  
structural steel/welding  
underground storage tank

**TSCA IMPLEMENTATION REPORT  
FORMER STEARNS AND FOSTER PROPERTY  
200 SHEPHERD AVENUE  
LOCKLAND, HAMILTON COUNTY, OHIO**

*PREPARED FOR:*  
**HAMILTON COUNTY OHIO  
B.A.D. Properties**

**JANUARY 7, 2013  
SME PROJECT NUMBER: 064310.00**



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OHW 000165720

January 7, 2013

Mr. Alan Debus  
United States Environmental Protection Agency, Region 5  
Ralph Metcalfe Federal Building  
77 West Jackson Blvd.  
Chicago, IL 60604

**RE: Former Stearns and Foster site  
200 Shepherd Avenue  
Lockland, Ohio  
PCB Release  
Project Serial Letter #17**

Dear Alan:

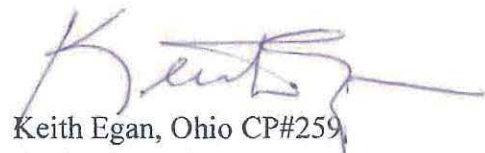
Enclosed is one copy of the remedial report for the PCB spill at the referenced property. The property was remediated under the Ohio Voluntary Action Program (VAP) and the area of the transformers was already included in that remediation based on the results of a Phase II Environmental Site Assessment. Due to the spill, the release was remediated in accordance with the *PCB Release Remedial Workplan* dated October 11, 2011, which was provided to you at that time.

The Volunteer addressed the property under the VAP. The enclosed report documents the activities performed on the property as well as off-property. Per our discussions, the VAP methods and standards were used to address on and off-site impact and that the United States Environmental Protection Agency (USEPA) is comfortable with using the VAP methods and standards for addressing off-site impact as long as the USEPA has final authority. A draft version of the attached report was submitted to the VAP with the No Further Action Letter. The VAP concurred with the findings and issued a Covenant Not to Sue for the property on November 29, 2012. A copy of the letter issuing the Covenant Not to Sue is also enclosed.

consultants in the geosciences, materials, and the environment

If you have any questions, please feel free to contact me at (513) 319-8918. Thanks for your assistance.

Respectfully,  
**SOIL AND MATERIALS ENGINEERS, INC.**



Keith Egan, Ohio CP#259  
Senior Consultant

Enclosure

cc: Ms. Bonnie Rack, B.A.D. Properties



consultants in the geosciences, materials, and the environment



**Environmental  
Protection Agency**

John R. Kasich, Governor  
Mary Taylor, Lt. Governor  
Scott J. Nally, Director

**NOV 29 2012**

**CERTIFIED MAIL**

Bonnie Rack  
B.A.D. Properties LLC  
1506 Riesenbergl Lane  
Cincinnati, OH 45215

AND

91 7199 9991 7030 4725 0345

Jeff Aluotto  
Hamilton County - Assistant Administrator  
138 East Court Street  
Cincinnati, OH 45202

**RE: Issuance of Covenant Not To Sue for the Former Stearns & Foster  
Property (12NFA466)**

Dear Ms. Rack and Mr. Aluotto:

I am pleased to inform you that on **NOV 29 2012**, the Director of the Ohio Environmental Protection Agency ("Director") issued a Covenant Not To Sue ("CNS") to B.A.D Properties LLC and Hamilton County for the Former Stearns & Foster property, located at 200 Shepherd Avenue, Lockland, Hamilton County, Ohio. The CNS was issued as Final Findings and Orders pursuant to Ohio Revised Code ("ORC") Chapter 3746 and Ohio Administrative Code ("OAC") Chapter 3745-300.

The CNS states that based on the NFA Letter, and subject to all conditions set forth in these Findings and Orders, Ohio EPA covenants not to sue and releases B.A.D. Properties LLC and Hamilton County, and their respective agents, employees, members, shareholders, officers, directors, successors and assigns, and successors and assigns of the Property, from all civil liability to the State of Ohio to perform additional investigational and remedial activities. The covenant not to sue and release of liability applies to the Property that has undergone a Phase I or Phase II property assessment in compliance with ORC Chapter 3746 and OAC Chapter 3745-300 or has been the subject of remedial activities conducted under ORC Chapter 3746 and OAC Chapter 3745-300 to address a release of hazardous substances or petroleum, and the assessment or the remedial activities demonstrate or result in compliance with applicable standards.

Enclosed is a certified copy of the CNS and its exhibits for B.A.D. Properties LLC to record the documents in the same manner as a deed for the property, as instructed by the CNS (see the "Conditions and Limitations" section). The enclosed Affidavit should

be presented to the county recorder's office staff to support the required recording. Remember to submit to Ohio EPA after the recording a complete copy of the CNS that shows the filing date stamp of the county recorder's office.

The complete copy of the stamped document should be sent to the to the attention of Angela Edwards, Records Management Officer, DERR, Ohio EPA Central Office, at the following address:

Ohio EPA – Division of Environmental Response & Revitalization  
Assessment Cleanup & Reuse Section – Voluntary Action program  
50 W. Town St., Suite 700  
Columbus, OH 43215

Further, the Environmental Covenant - attached to the CNS as Exhibit 4 - must also be recorded in the same manner as a deed to the Property (see the "Conditions and Limitations" section of the CNS). Please record the Environmental Covenant just prior to and separate from the recording of the CNS and its remaining exhibits in the Property's chain of title. The CNS becomes effective on the date of the recording of the Environmental Covenant. Like the CNS recording, remember to submit to Ohio EPA (at the address listed above) a complete copy of the Environmental Covenant that shows the county recorder's date stamp. For questions on the recording of these documents, please contact the Ohio EPA Legal Office attorney designated below at (614) 644-3037.

OAC 3745-300-03 authorizes Ohio EPA to charge for its actual costs that it may incur related to site-specific activities, such as the monitoring of compliance with the CNS and its Risk Mitigation Plan, including the review of the submitted reports. This agency will send a separate correspondence to provide the number of the VAP account established for the Property and to ask you to verify the billing information.

This action of the Director is final and may be appealed to the Environmental Review Appeals Commission ("Commission") pursuant to ORC 3745.04. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00, made payable to "Treasurer, State of Ohio", which the Commission, in its discretion, may reduce if by affidavit it is demonstrated that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days after the appeal is filed with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Commission at the following address: Environmental Review Appeals Commission, 77 South High Street, 17<sup>th</sup> Floor, Columbus, Ohio 43215.



Congratulations on the issuance of this CNS. Many persons within the agency, Hamilton County, B.A.D. Properties LLC and Soil and Materials Engineers Inc, among others, worked hard to remove the environmental barriers associated with redeveloping this property. If you have any questions or concerns, feel free to contact me at (614) 644-2924 or via e-mail at [tiffani.kavalec@epa.state.oh.us](mailto:tiffani.kavalec@epa.state.oh.us).

Sincerely,

A handwritten signature in cursive script, appearing to read "Tiffani Kavalec", with a small "for" written below it.

Tiffani Kavalec, Manager  
Division of Environmental Response & Revitalization  
Assessment, Cleanup and Reuse (ACRE)

Enclosure

cc: **Keith Egan**, Certified Professional, Soil and Materials Engineers, Inc.

ec: Martin Smith, DERR-SABR  
Andrea Smoktonowicz, Legal Office  
[records@epa.state.oh.us](mailto:records@epa.state.oh.us)

above ground storage tank  
air quality  
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baseline environmental assessment  
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building/infrastructure restoration  
caisson/piles  
coatings  
concrete  
construction materials services  
corrosion  
dewatering  
drilling  
due care analysis  
earth retention system  
environmental compliance  
environmental site assessment  
facility asset management  
failure analyses  
forensic engineering  
foundation engineering  
geodynamic/vibration  
geophysical survey  
geosynthetic  
greyfield redevelopment  
ground modification  
hydrogeologic evaluation  
industrial hygiene  
indoor air quality/mold  
instrumentation  
masonry/stone  
metals  
nondestructive testing  
pavement evaluation/design  
property condition assessment  
regulatory compliance  
remediation  
risk assessment  
roof system management  
sealants/waterproofing  
settlement analysis  
slope stability  
storm water management  
structural steel/welding  
underground storage tank

**TSCA IMPLEMENTATION REPORT  
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*PREPARED FOR:*  
**HAMILTON COUNTY OHIO  
B.A.D. Properties**

**JANUARY 7, 2013  
SME PROJECT NUMBER: 064310.00**

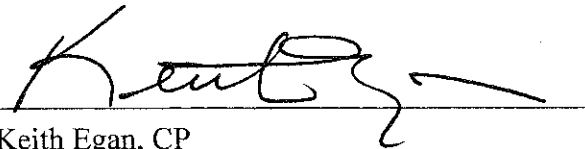


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**Soil and Materials Engineers, Inc.**

Soil and Materials Engineers, Inc. (SME) prepared this report following stringent quality assurance and quality control guidelines to ensure that the information presented in the report meets the requirements of 40 CFR § 761.61. If you have any questions or comments concerning this report, please contact the individual listed below.

**SOIL AND MATERIALS ENGINEERS, INC**

A handwritten signature in black ink, appearing to read "Keith Egan", is written over a horizontal line.

**Certified Professional:**

Keith Egan, CP  
Senior Project Manager,



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Figure 1 – Property Location Map

Figure 2 – Remedial Area Location Map

Figure 3 – Storm Sewer Sample Locations

Figure 4 – Storm Sewer Video Survey Results and Sample Locations

Figure 5 – SME Phase II PCB Sample Locations

Figure 6 – PCB Remedial Area

## **TABLES**

Table 1 – Initial PCB Results

Table 2 – Phase II Property Assessment Soil Sample Results

Table 3 – Remaining Soil in PCB Release Area

## **APPENDICES**

Appendix 1 -- Photographs

Appendix 2 – Mill Creek Map

Appendix 3 – Disposal Documentation

Appendix 4 – Deed Restrictions

Appendix 5 – Laboratory Data Sheets

Appendix 6 – Statistical Evaluation

**TSCA IMPLEMENTATION REPORT  
FORMER STEARNS AND FOSTER PROPERTY  
200 SHEPHERD AVENUE  
LOCKLAND, HAMILTON COUNTY, OHIO 45150**

**1.0 INTRODUCTION**

Soil and Materials Engineers, Inc. (SME) prepared this *TSCA Implementation Report* on behalf of the property owner, B.A.D. Properties LLC, for polychlorinated biphenyls (PCB) remediation activities conducted in response to a release from PCB transformers at the former Stearns and Foster facility, located at address 200 Shepherd Avenue in Lockland, Hamilton County, Ohio (the site). Figures 1 and 2, show the location of the site and the affected area of the site.

The site participated in an Ohio Voluntary Action Program (VAP) Brownfield redevelopment and is a portion of the larger former Stearns and Foster property. The site received a Covenant Not to Sue for the Ohio VAP on November 29, 2012, and a draft copy of this report was included in the No Further Action Letter submitted to the Ohio VAP. The site consists of an irregular-shaped parcel of land approximately 5.96 acres in size that was the eastern portion of the former Stearns and Foster Textile Plant. The site is bounded by Shepherd Avenue on the west, a residential property on the north, by the Cleveland, Cincinnati, Chicago & St. Louis Railroad on the east, and by East Wyoming Street on the south. The remediation activities at the site to facilitate the redevelopment are being completed to the OEPA VAP commercial/industrial direct contact standards.

A performance-based work plan, *PCB Remediation Work Plan*, was prepared in May of 2011 for the site to address PCBs found in a concrete slab supporting three PCB containing electrical transformers. The transformer cabinets, dielectric fluids, and concrete pad were to be removed and properly disposed to prepare the property for redevelopment. The purpose of that Work Plan was to describe the activities that would be implemented to satisfy the performance-based disposal requirements outlined in Title 40 of the Code of Federal Regulations (CFR) §761.61 (b) of the Toxic Substances Control Act (TSCA) for PCB remediation waste.

Several days prior to the scheduled draining of the dielectric fluid and removal of the transformers, an unknown person bypassed two locked gates and opened the drain valve on one of the transformers releasing approximately 185 gallons of PCB contaminated fluid<sup>1</sup>. This occurred between 5:00 and 8:15 pm on August 31, 2011, and was discovered by a Village of Lockland fire fighter who was passing by the property. The local fire department was notified and an Immediate Response Action began immediately.

The Ohio Environmental Protection Agency (OEPA) On-Scene Coordinator, Mr. Dale Farmer, arrived at the property and directed employees of Homrich, Inc., the demolition contractor, and Disposal Solutions to place floor dry on the concrete and asphalt. The entire area was covered with High Density Polyethylene (HPDE) and security tape was placed blocking access to the impacted area.

Due to the release, a new work plan, *PCB Release Remedial Work Plan*, dated October 11, 2011, was prepared and submitted to the United States Environmental Protection Agency (USEPA) to document the PCB remediation activities already implemented to address the above referenced release of PCBs and summarize the additional activities that will be implemented to satisfy the risk-based disposal requirements outlined in Title 40 of the Code of Federal Regulations (CFR) §761.61(c) of the TSCA for PCB remediation waste. No response to this notification has been received and SME assumed the plan was approved.

---

<sup>1</sup> This is the capacity of the transformer; it is not known if the transformer was full.

## **2.0 BACKGROUND**

### **2.1 Property Description and History**

The Property is located north of downtown Cincinnati, Ohio at 200 Shepherd Ave. in Lockland (Hamilton County), Ohio. For the purpose of the Voluntary Action Program (VAP) and the CORF, the Property is partially bounded to the east by Interstate 75 or by the by the Cleveland, Cincinnati, Chicago & St. Louis Railroad on the east followed by Mueller Roof distributor, and to the west by Shepherd Avenue followed by the reminder of the former Stearns and Foster manufacturing facility. The Property is further bounded to the north by a residential property, and to the south by East Wyoming Avenue; followed by commercial properties of downtown Lockland.

The Property consists of approximately 5.96 acres of land and is generally flat to gently sloping to the northeast. The Property is currently undeveloped. For over 135 years, Stearns and Foster manufacture mattresses and textiles at the Property. Cotton was shipped in bulk to the Property and few chemicals were used. Coal was stored in the northeast corner of the Property and is the likely source for the arsenic and PAH impact in that area. All buildings, structures, and infrastructure related to manufacturing at the Property have been razed. The Property is not currently used for any purpose. The intended future land use of the Property is commercial and industrial.

The transformers were located on a concrete floor in a three-walled brick structure with a roof. The northeast face of the structure was secured by a chain-linked fence. The PCB contaminated fluid pooled on the concrete floor under the transformers and flowed out the northeast, fenced side of the structure onto the concrete slab outside the fence. The fluid then flowed topographically down gradient over the concrete slab outside the transformer structure then under a metal gate down a concrete access towards Sheppard Street. The area outside the metal gate consisted of the concrete drive access, a concrete sidewalk, and a grass covered area between the sidewalk and the road. The PCB fluid also flowed outside the northwest building wall of the transformer structure at the interface of the concrete floor and brick wall onto the concrete sidewalk and grass covered area between the sidewalk and the road. The area between the metal gate and the road is not fenced, but is part of the Stearns and Foster property. A storm sewer manhole and grate was located in the road adjacent to the release area. The manhole drains into concrete storm sewer pipes located under the property that eventually discharge to the

Mill Creek located approximately 360 feet east of the property. The storm sewer run including the manhole in Sheppard Avenue includes 6 manhole structures. The storm sewer line is depicted on Figure 2.

## **2.2 Release Response**

SME became aware of the spill at approximately 8:30 am on September 1, 2011. SME visited the site to gain information and to acknowledge that Homrich, Inc., and Disposal Solutions should continue the response action by removing the visibly impacted concrete and soil outside of the fenced portion of the Property between the metal gate and Sheppard Avenue as requested by the On-Scene Coordinator. This area included the sidewalk outside the northwest transformer structure building wall and underlying soil, soil between the sidewalk and Sheppard Avenue, and a portion of the concrete drive between the metal gate and Sheppard Avenue. The removed concrete and soil was stored on HPDE within the transformer structure. The soil beneath the concrete drive did not appear significantly impacted and only 6 inches of soil was removed. The soil beneath the sidewalk was visibly stained to a depth of three feet below ground surface (bgs) and as such, the excavation extended to this depth. The excavated area was covered with HPDE and the area secured with security tape.

SME visually inspected the storm sewer inlets and adjacent manhole and the evidence suggested a small amount of transformer oil had entered the storm sewer. As such, the storm sewer inlets were sealed with HDPE. It should be noted that although it had not rained, an inspection of the manholes at this time showed a minor amount of water flowing through the sewer. However, SME observed water was not discharging from the outfall. While it did not appear at that time that the release was sufficient to travel through the outfall, the small amount of water in the storm sewer may have transported the PCBs further into the sewer.

The National Response Center was notified at 11:40 am, September 1, 2011, and Case #988096 was assigned to the release. The United States Environmental Protection Agency (USEPA) Region 5 was notified at noon of the same day. As discussed above, the storm sewer adjacent to the area traverses the property and discharges to the Mill Creek. SME visually evaluated Mill Creek, but did not observe oil, sheen, or other visible evidence of a release to the creek. However, the Mill Creek Watershed Council was notified as a precaution. Finally, a *Notification of PCB Activity* (Form OMB No. 2070-0112) was submitted to the USEPA.



A security firm was retained to provide full-time security when work was not being conducted on the Property. On September 7, 2011, operations to drain the oil from the transformers began and were completed the following day. The transformers were removed and the oil and transformers were transported to a TSCA disposal facility. At the request of the OEPA On-Scene Coordinator, the HPDE covered excavation between the metal gate and Sheppard Avenue was lined with additional HPDE to prevent storm water infiltration, and then covered with a tarp to hinder storm water from entering the excavation.

On September 8, 2011, the transformers were drained and the oil and transformers were transported to Environmental Recycling in Bowling Green, Ohio for disposal.

Photographs of the response action and other activities performed related to the release are provided in Appendix 1.

## **2.3 Phase II Assessment Activities Related to the Release.**

### **2.3.1 Pre-Release Assessment**

The concrete slab that supported the former transformers had been investigated during the 2004 Floyd Browne Phase II Environmental Site Assessment. The slab was found to contain PCBs in wipe samples exceeding  $10 \mu\text{g}/100 \text{ cm}^2$  in each of the seven samples collected. The concentrations ranged from  $32.7 \mu\text{g}/100 \text{ cm}^2$  to  $657,000 \mu\text{g}/100 \text{ cm}^2$ . The concentrations were highest adjacent to the transformers. The concentrations are assumed to be higher after the release. Because PCBs were present on the surface of the concrete during the 2004 investigation, bulk pulverized concrete samples were collected by Floyd Brown from the cuttings of percussion drilled holes drilled approximately 3 inches into the upper surface of the concrete slab. PCBs were detected in all seven of the concrete samples collected. Five of the seven concrete samples were measured above the unrestricted regulatory limit of one milligram per kilogram ( $\text{mg}/\text{kg}$ ) which is equivalent to one part per million ( $\text{ppm}$ )<sup>2</sup>. The PCB concentrations above one ppm ranged from 1.6 ppm to 404 ppm. To evaluate if the soil beneath the concrete slab had been impacted, the investigator cored through the slab and one soil sample was collected from beneath the slab at the location of the highest PCB impact measured in the pulverized concrete sample. No PCBs were detected in the soil sample collected from beneath the concrete pad.

<sup>2</sup> The USEPA uses ppm while the VAP uses  $\text{mg}/\text{kg}$ . The units applicable to the regulatory agency will be used.

### 2.3.2 Post Release Assessment

Subsequent to the release on August 31, 2011, SME collected wipe samples of four manholes (Figure 3). The samples were from the manhole in Shepherd Avenue and three of the manholes along the storm sewer running from the Shepherd Avenue manhole to the Mill Creek. A wipe sample of the outfall was also collected. Due to access and time restrictions, the wipe samples were not collected using a sampling template, but the sample area was approximately 100 cm<sup>2</sup>. The wipe results are presented in Table 1; each wipe contained low levels of PCBs. Figure 4 depicts additional information on the storm sewer including the results of a video survey discussed in Sections 2.3.3 and 5.0. SME also collected three soil samples (Drive 1, Drive 2, and Sidewalk 1) from the bottom of the soil excavation between the metal gate and Sheppard Avenue to confirm all PCB impact had been removed. Figure 5 shows the sample locations. The results were in excess of Ohio VAP commercial/industrial direct contact standards (18 mg/kg). As such, additional excavation will be required; this may include the sides which were not sampled.

Mill Creek sediment samples were collected from the base of the outfall and up to 130 feet downstream. Sediment samples were also collected from the creek starting 100 feet above the outfall continuing approximately one-mile upstream from the outfall (see Sheet 1 of 1 in Appendix 2). The OEPA Division of Surface Water has documented the presence of PCBs in the Mill Creek at concentrations up to 1.6 mg/kg with the highest concentration at River Mile 13, which is approximately 1,000 feet upstream from the Stearns and Foster storm sewer outfall<sup>3</sup>. One source of the PCBs was attributed by OEPA to the General Electric plant via a tributary to the Mill Creek. The tributary is approximately one-mile north of the Stearns and Foster storm sewer outfall. According to the OEPA report, the General Electric plant remediated soil and sediment under the directive of the USEPA. SME also collected surface water samples at the base of the outfall and approximately 100 feet upstream.

Several of the sediment samples contained low levels of PCBs while PCBs were not detected in the surface water (Table 1). Of the sediment samples collected, 57% of the upstream samples contained PCBs while 33% of the samples collected from the portion of the creek adjacent to the outfall and within 130 feet downstream of the outfall contained PCBs.

The outfall pipe is separated from the actual storm sewer by a ditch; the storm sewer discharges to the ditch which then enters a pipe that discharges above the creek. Three soil samples from

<sup>3</sup> *Biological and Water Quality Study of Mill Creek and Tributaries*. OEPA, 1994.

the ditch were collected. Water discharging from the pipe was also collected. The flow rate of this water was approximately 0.05 gallon per minute. The sampling results are presented in Table 1. One soil sample exceeded the OEPA VAP commercial/industrial direct contact standard of 18 mg/kg. None of the samples exceeded the VAP construction worker direct contact standard of 25 mg/kg, which is the same as the TSCA low-occupancy standard. Based on the relatively low levels of PCBs in the sewer compared to the soil samples, it appears much of the impact was captured by the soil in the ditch. To prevent soil from being carried into the creek, a portion of the ditch was covered in plastic sheeting and a silt fence was installed at the up gradient end of the plastic. Due to the presence of collapsed shoring timbers and vegetation, the very upper end of the ditch was not lined. The silt fence prevented soil in this area from being transported onto the liner and into the creek.

OEPA considers the Mill Creek a navigable water; therefore, the §761.79 standard for water discharging to the creek is 3 µg/L. The outfall sample result of 1.1 µg/L was less than the standard. The low flow of the discharge water indicates dilution was not affecting the results.

### **2.3.3 Phase II Assessment**

SME decided to define the extent of PCB impact using methods consistent with the Ohio VAP in addition to remedial confirmation sampling conducted in accordance with TSCA. The soil in the area around the release area was sampled (PC1 through PC19) as well as the visually impacted concrete curbing (wipe samples W1 through W8). The results are presented in Table 2 while the sample locations are shown on Figure 3.

As discussed in Section 5.0, the storm sewer was cleaned by double washing using a jet sprayer and vacuum extraction system. Following cleaning, the storm sewer was inspected using a sewer video camera to identify areas of potential leakage. In addition, the location of the storm sewer was surveyed to aid in future subsurface sampling. Finally, the depths of the storm sewer were measured to determine subsurface sampling depths. The location of the survey, issues identified during the video survey, and subsequent soil sampling locations are shown on Figure 4. The sewers ranged in depth from 6 to 11 feet bgs.

There was a deviation from the work plan during the video survey of the storm sewer. For the west section of the storm sewer, the camera was inserted from both ends (MH1 and MH2) and got stuck or could not be pushed further. For the east section, the camera was inserted at MH2

but could not be pushed further than the location shown on Figure 4. The subcontractor, EMS, did not want anyone to enter MH3 because of an offset in the brick structure. He felt it was not safe to enter. As such, these sections were not surveyed. However, these sections were evaluated with soil samples and as such; these deviations do not affect our conclusions.

Following the identification of any potential leaks, SME sampled the subsurface soils using a direct-push rig up to two feet beyond the depth of the storm sewer (Figure 4). Samples were collected at the locations where the video survey indicated a leak could occur. Samples were also collected along the sections of the storm sewer that could not be video surveyed. Soil samples were collected for laboratory analysis at the interval corresponding to the storm sewer or immediately below it, depending on indicators of impact such as elevated field screening results, odors, presence of oil, etc. Soil samples submitted for laboratory analysis were analyzed using USEPA Method SW846-8082. No PCBs were detected in any of the samples collected along the storm sewer and the results are not presented in a table. The laboratory reports are presented in Appendix 5.

#### **2.4 Summary of Conclusions in Response to Phase II Property Assessment**

Based on the investigation results, the Phase II assessments concluded that the soils at the Property presented a risk to commercial and industrial receptors within the PCB release area. The soil within the ditch on the property to the east could be isolated from future receptors with a soil cap. The Mill Creek sediment should be evaluated for potential remediation.

### 3.0 PROPERTY SOIL REMEDIATION

#### **3.1 Remediation Methods**

Excavation and off-Property disposal and/or remediation of soil and concrete material were chosen as the method of remediation for the PCB release area. Remediation of the PCB release area was performed in accordance with the risk-based TSCA work plan submitted to the USEPA on October 11, 2011.

Excavation and loading of PCB impacted concrete and soil in the PCB release area was performed between January 2<sup>nd</sup> and February 28<sup>th</sup> 2012. The areas to be excavated were determined by the Phase II soil sample results, the boundary of the release area based on the foundations, as well as visually during excavation. Figure 5 provides the pre-remedial soil sample locations. The building (former) that housed the transformers was supported by subsurface foundations to the east, south, and north. During excavation of soil within (between) these foundations, it was evident that subsurface transformer oil migration was bounded by the interior portion of the foundation walls. Along the south and east walls, which adjoined the transformers within one foot, some oil migrated down the exterior portion of the foundation walls prior to contacting soil. This necessitated the additional excavation efforts in these directions.

The soil and concrete was initially removed within the boundary of the release area as defined by the foundations and Phase II results. Impacted soil was loaded directly onto trucks for off-Property disposal and remediation. Soil was initially removed to a depth of 4.5 feet below ground surface (bgs) in an area of approximately 1,400 square feet. This depth was selected for the following reasons:

- It was below the overlying sandy fill,
- It consisted of a silty clay, and
- It did not appear visually impacted.

Confirmation soil samples were collected using a grid-based sampling approach in accordance with TSCA requirements and the excavation area and sample locations are shown on Figure 5.

Floor samples were collected during the initial excavation to 4.5 feet bgs and included samples PRC1 through PRC67. Impact in excess of the risk-based TSCA standard of 25 mg/kg was present in several of the grids. These grids were subject to additional soil removal extending the depth to 6 feet bgs. In addition, the excavation was extended to the east and south of the initial excavation based on sample results and the presence on staining on the exterior portion of the foundations. Some of the additional excavation was performed not because the standards were exceeded, but because the results were high enough (PC9 and PC11) to affect the cumulative risk values used for the VAP.

Where a grid was subject to additional excavation, the sample identification for the new confirming sample was the same as the original with the exception that an "A" was added. For example, the original grid sample PRC1, became PRC1A. New grid samples were collected at PRC68 thorough PRC72. At the edges of the excavation, wall samples (PRCW1 through PRCW11) were also collected at the depth applicable to the previous impact at that area or as applicable to the VAP point of compliance.

Following remediation, the excavations were backfilled with imported fill. All fill material was tested by a VAP certified laboratory and the results are incorporated into the final risk assessment for the Property.

### **3.2 Soil Disposal**

A total of 613.9 tons of PCB impacted concrete and soil was transported to the Environmental Quality Company's Wayne Disposal facility in Belleville, Michigan. Copies of the weight tickets and manifests can be found in Appendix 3.

### **3.3 Notification**

A deed restriction, prepared in accordance with 40 CFR § 761.61(a)(8), was placed on the Property identifying this area as containing PCBs at concentration of less than 25 mg/kg. A copy of the deed restriction is provided in Appendix 4.



## **4.0 CONFIRMATION SAMPLE RESULTS**

### **4.1 Methodology**

The discrete soil samples were collected by hand. At each selected sampling location, SME collected a portion of sufficient weight for the chemical analyst to measure the concentration of PCBs and still have sufficient analytical detection sensitivity to reproducibly measure PCBs at the levels designated in §761.61(a)(4). SME used a core sampler having a diameter  $\geq 2$  cm and  $\leq 3$  cm to collect waste to a maximum depth of 7.5 cm (2.95 inches) below the floor of the excavation. These procedures are consistent with §761.286 and a photograph of the grid is provided in Appendix 1. All soil samples were analyzed using USEPA Method SW846-8082. Samples were placed in a cooler and delivered under chain-of-custody protocol between 2C° and 6C° to a Voluntary Action Program (VAP) certified laboratory; ALS Laboratories in Cincinnati, Ohio (CL#0022).

### **4.2 Results**

Soil confirmation results representing the soil remaining in the PCB area are provided in Table 3. Laboratory data sheets are included as Appendix 5. None of the final excavation limit samples contained PCBs above the TSCA low occupancy standard at any depth or the VAP commercial/industrial standard within the point of compliance.

## **5.0 STORM SEWER REMEDIATION**

The storm sewer was cleaned by double washing using a jet sprayer and vacuum extraction system. The manhole (MH-6) just past the down-gradient property line was blocked with an inflatable sewer packer and a vacuum truck installed the water collection hose at this location. The sewer was cleaned beginning at Shepherd Road and proceed to the collection manhole. The wash water and accumulated sediment was characterized and disposed based on the analytical results and the applicable requirements of §761.79. Water samples submitted for laboratory analysis were analyzed using USEPA Method SW846-8082.

Storm sewer wash water contained PCBs and as such, the water was disposed Spring Grove Resource Recovery and Clean Harbors located in Cincinnati and Twinsburg, Ohio, respectively. Disposal manifests are provided in Appendix 3.

Following the washing and videotaping, the storm sewer on the Property was permanently closed by pumping concrete into the system at each manhole. Any laterals on the Property that connected to MH-6, located just down-gradient of the Property were removed. There are no more storm sewer inlets between MH-6 and the creek. Photographs of the concrete placement are provided in Appendix 1.

## 6.0 NEIGHBORING PROPERTY REMEDIATION

The ditch on the adjoining commercial property contained PCBs at concentrations up to 25 mg/kg. The property owner decided to address this impact by capping it with three to four feet of clean soil. This soil was capped between April 23<sup>rd</sup> and April 27<sup>th</sup> 2012. The cap prevents contact with the impacted soil which is located in a low occupancy area that is essentially inaccessible to company employees and is not accessible to the general public<sup>4</sup>. A deed restriction prepared in accordance with 40 CFR § 761.61(a)(8), was placed on this property to identify the presence of the PCB impact (Appendix 4).

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<sup>4</sup> The ditch is adjacent to the materials storage yard behind the retail building.

## 7.0 MILL CREEK EVALUATION

As discussed in Section 2.3, the sediment in the Mill Creek was sampled adjacent to the storm sewer outfall, upstream, and downstream (see Sheet 1 of 1 in Appendix 2). The OEPA Division of Surface Water had documented the presence of PCBs in the Mill Creek at concentrations up to 1.6 mg/kg with the highest concentration at River Mile 13, which is approximately 1,000 feet upstream from the Stearns and Foster storm sewer outfall. One source of the PCBs was attributed to the General Electric plant via a tributary to the Mill Creek. The tributary is approximately one-mile north of the Stearns and Foster storm sewer outfall.

Several of the sediment samples contained low levels of PCBs while PCBs were not detected in the surface water (Table 1). Of the sediment samples collected, 57% of the upstream samples contained PCBs while 33% of the samples collected from the portion of the creek adjacent to the outfall and within 130 feet downstream of the outfall contained PCBs.

The upstream sediment results were statistically compared to the other results using the t-test and the Mann Whitney U-test. Both tests are recommended in publications such as *A Guide for Selecting Statistical Techniques for Analyzing Social Science Data* (The University of Michigan), *Intuitive Biostatistics* (Oxford University Press), *Lake and Reservoir Bioassessment and Biocriteria Technical Guidance Document* (USEPA) and *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods* (USEPA). All of these indicated the t-test was an appropriate method for the comparisons being performed while the Mann Whitney test was more robust than the t-test.

The results of the statistical comparison are provided in Appendix 6. The evaluation shows that the impact in the creek adjacent to and downstream of the outfall is not statistically different than the upstream samples. The release did not cause additional impact to the creek and as such, a remedial response is not required.

The Mill Creek has been the discharge point for industrial waste in Hamilton County since the area was first settled. The public perception of the creek's mainstream is as an open sewer. In 1992, Ohio EPA conducted its first comprehensive chemical and biological survey of Mill Creek and some of its tributaries. There were elevated levels of lead and other heavy metals, organic compounds, pesticides, PCBs, and ammonia. Fish and benthic macroinvertebrates were

adversely impacted by multiple stressors, including contaminated sediments, channelization of the stream, loss of stream and riparian habitat, combined sewer overflows and other pollutants, and a widely-ranging flow regime. Ohio EPA found only pollution-tolerant fish and other aquatic species like sludge worms, blood worms, and leeches in inner-city segments of the creek. Polychlorinated biphenyls were found in fish tissue, resulting in a fish consumption advisory by the Ohio Department of Health. For almost the entire Mill Creek main channel in Hamilton County, and for a number of tributaries, the Ohio EPA recommended that there be no public contact with the stream.

The statistical analysis demonstrated that the release did not cause additional impact to the creek. In addition to the documented problems with the Mill Creek, the creek is considered poor habitat for aquatic species. This section of the creek was realigned during the U.S. Army Corps of Engineers Mill Creek Flood Damage Reduction in the 1980s as authorized by The Flood Control Act of 1970. One effect of the realignment is that the PCBs observed in the area around the outfall are not present in what the State of Ohio Department of Natural Resources (ODNR) considers "sediment". This area contains limited amounts of sand, gravel, and cobbles sitting on a hard pan bottom. The ODNR considers sediment as silty material than can support macroinvertebrate populations. The USEPA, in addressing PCB in river sediment cleanups in Region V, have directed that only "soft sediment" be remediated for PCBs as this is the material that affects the ecosystem and presents risks to human and ecological receptors. The concentrations of PCBs observed do not present a direct contact risk to the few human receptors that visit this creek. There is no access to the creek to the public, the creek is widely known to be impacted, and there are and have been fish advisories for most of the creek. The lack of sediment in this portion of the creek indicates this area is not conducive to macroinvertebrates and the fish that prey on them. Therefore, the PCB impact that has been present in the creek for several years presents no undue risks.

## 8.0 SUMMARY AND CONCLUSIONS

The remediation that was performed at the Property was successful in eliminating the direct contact risk. Sufficient sampling was performed during the Phase II investigation and at the completion of the remediation to verify this conclusion. The sewer was closed to prevent residual impact from flowing off-Property. The release did not contribute to the impact in the Mill Creek. No Further Action is necessary in regards to this release. On November 29, 2012, the OEPA issued a Covenant Not to Sue to the Property agreeing that the Property had been remediated.

None of the results from soil samples collected within the Property boundary at IA4 or IA5 following the final remediation exceed the commercial/industrial direct contact standard for PAH's or arsenic. Remediation at IA8 extended to the four sample locations that had defined the arsenic extent. This is also true for the PCBs at IA2 and sidewall samples further determined the PCBs within the point-of-compliance were below the commercial/industrial direct contact standards.

The remedial action has remediated the Property to allow for commercial and industrial use. A multi-chemical evaluation was been performed to confirm this conclusion and was submitted as a separate report (Volume VII of the OEPA No Further Action documentation).



## FIGURES

*Figure 1 – Property Location Map*

*Figure 2 – Remedial Area Location Map*

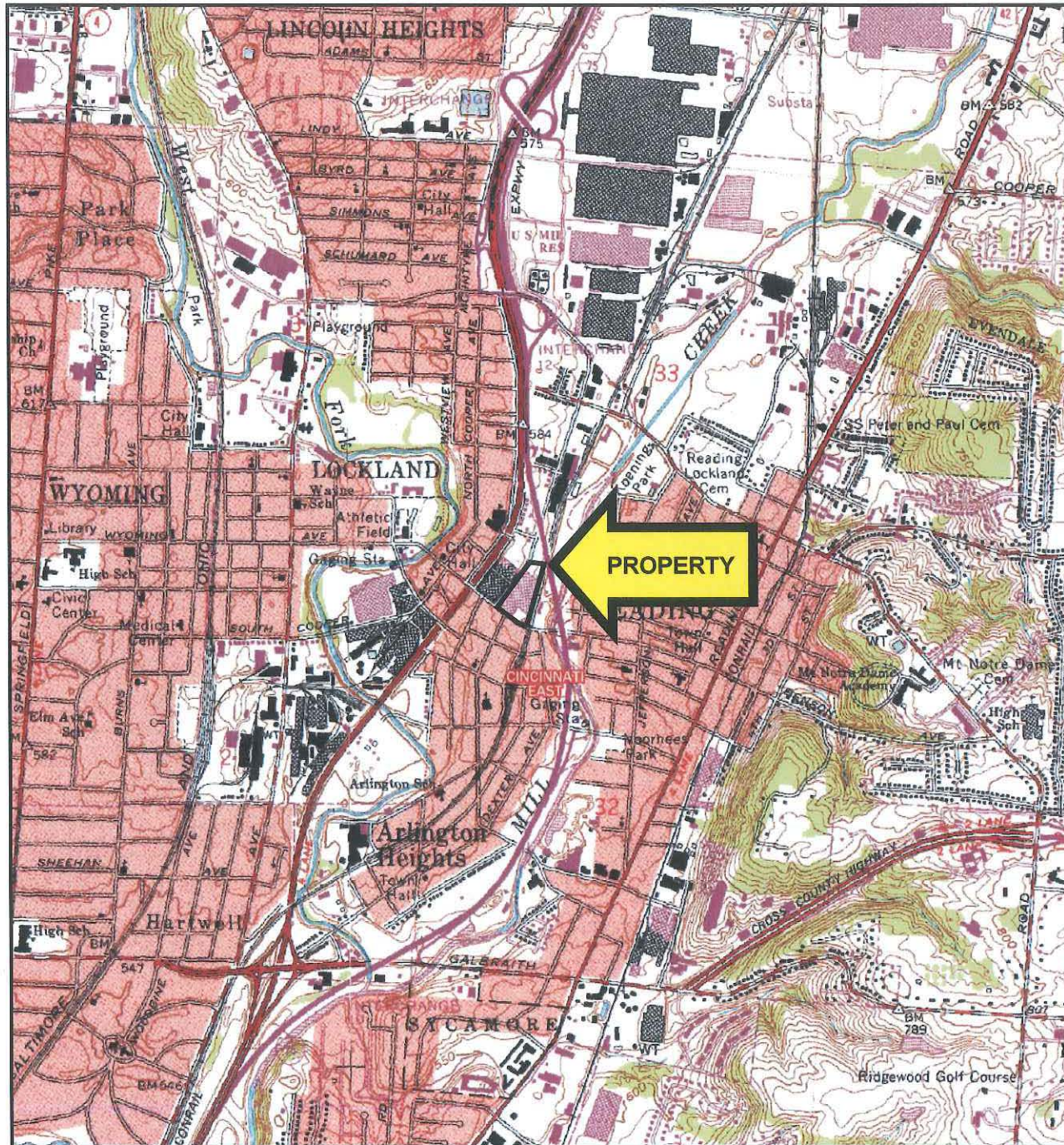
*Figure 3 – Storm Sewer Sample Locations*

*Figure 4 – Storm Sewer Video Survey Results and Sample Locations*

*Figure 5 – SME Phase II PCB Sample Locations*

*Figure 6 – PCB Remedial Area*





Base map obtained from ©DeLorme Topo North America™ 9.

0' 2000'  
SCALE: 1" = 2000'

USGS QUADRANGLE(S) REFERENCED  
CINCINNATI EAST (1988)



May 16, 2011 - 4:42pm - jblake

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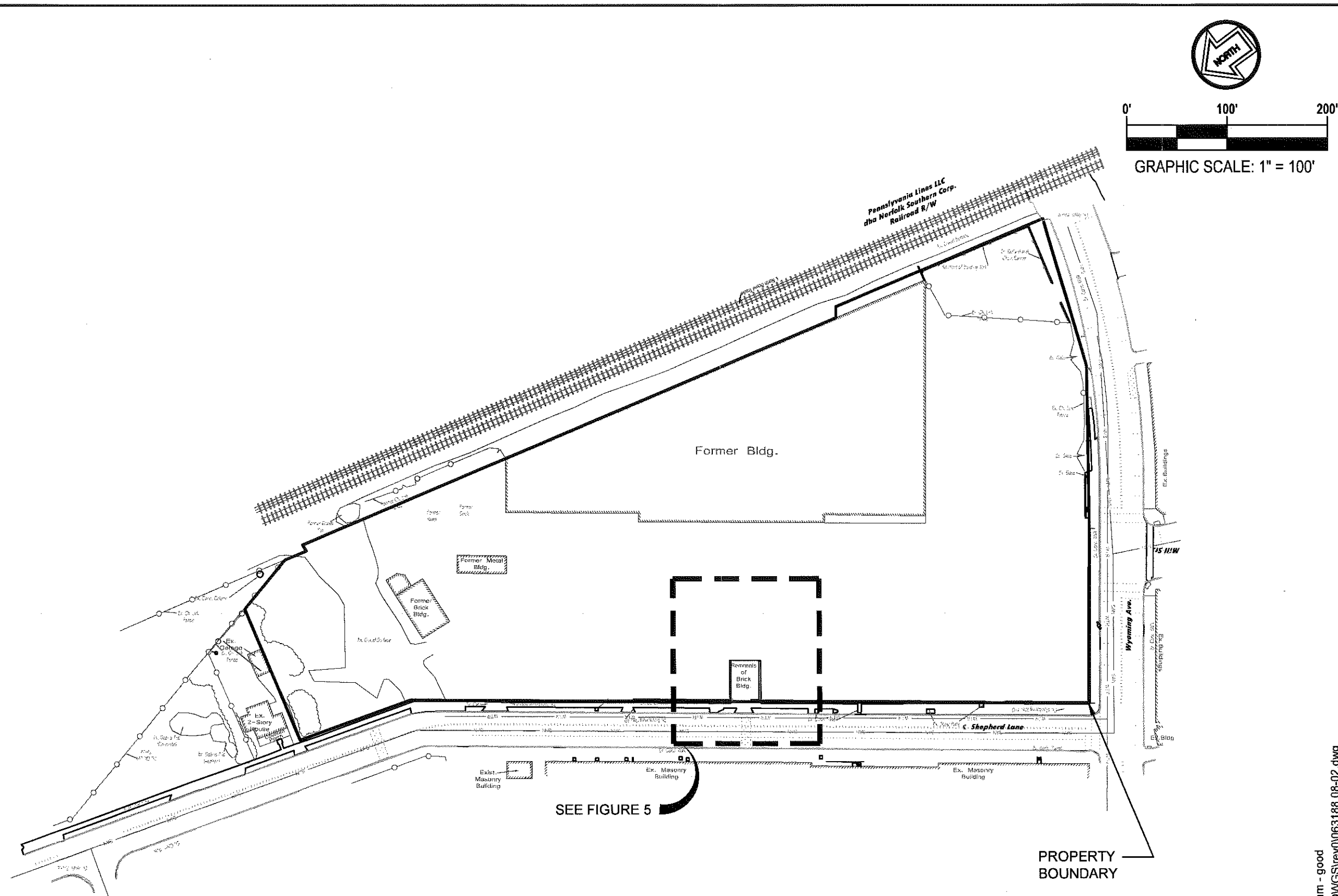
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Michigan  
Ohio

Date  
4-20-11  
Drawn By  
JAB  
Scale  
1" = 2000'  
Project  
TE63188D

**PROPERTY LOCATION MAP  
FORMER STEARNS AND FOSTER PROPERTY  
200 SHEPHERD AVENUE  
LOCKLAND, OHIO**

Figure No. 1





NOTE:  
DRAWING INFORMATION TAKEN FROM SURVEY  
PERFORMED BY BAUMAN LAND SURVEY.

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Michigan  
Ohio**

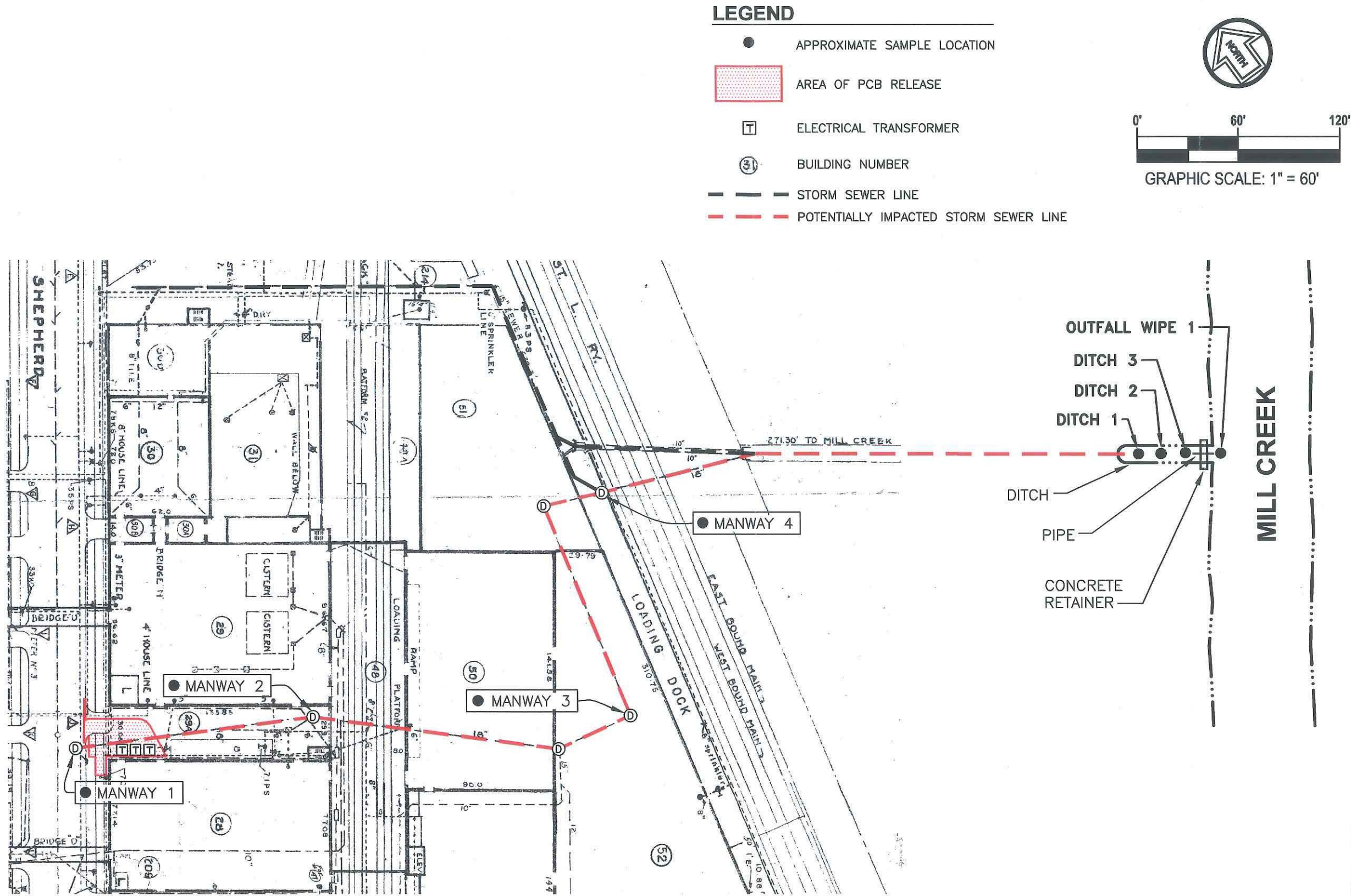


Date	04-27-12			No.	Revision Date
Drawn By	SRG				
Designed By	KE				
Scale	1" = 100'				
Project	063188.08				

**REMEDIAL AREA LOCATION MAP**

**FORMER STEARNS & FOSTER PROPERTY**

**LOCKLAND, OHIO**



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No.	Revision Date

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Designed By	KE
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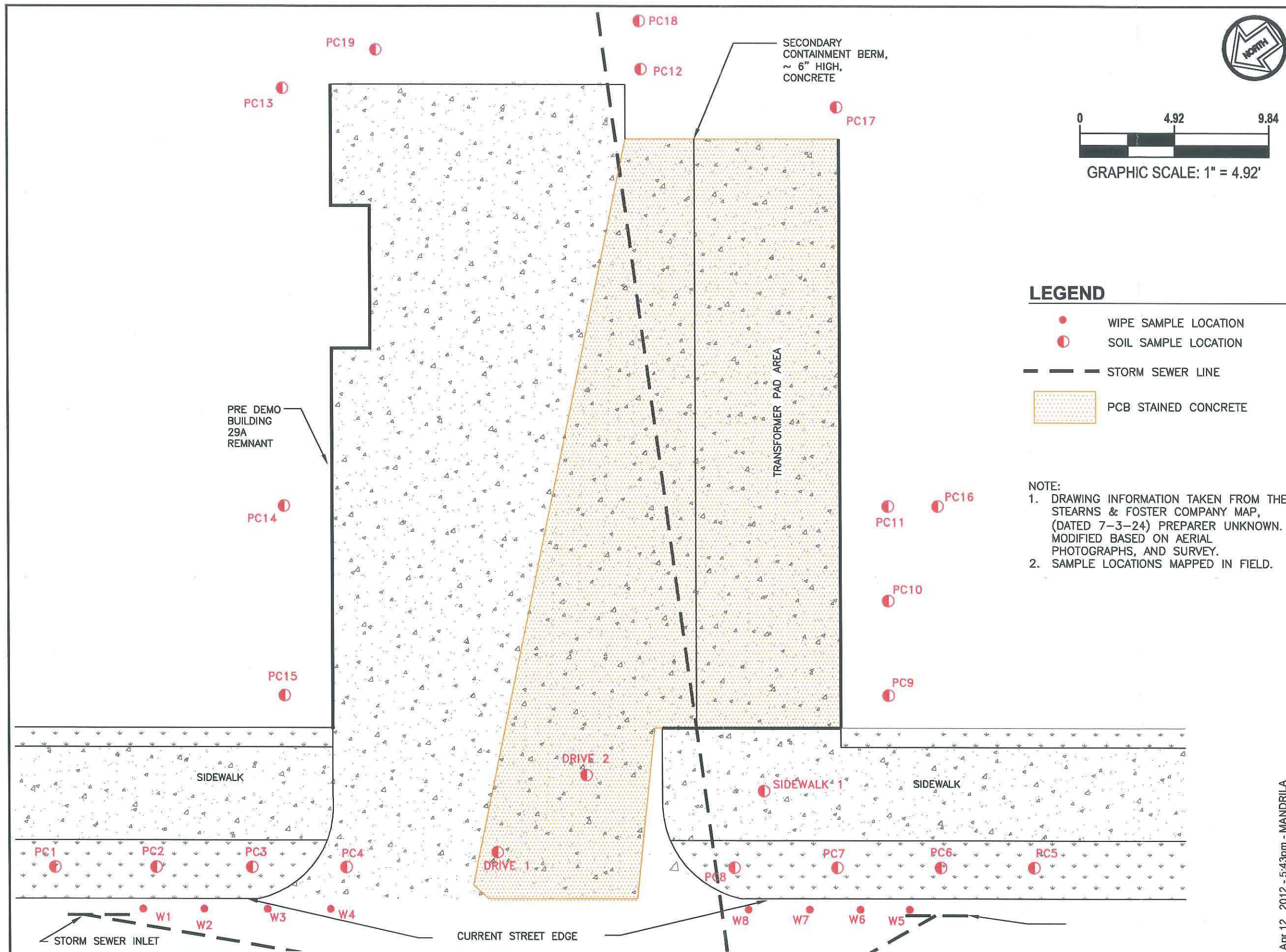


Figure No. 3









No.	Revision	Date

**SME PHASE II PCB SAMPLE LOCATIONS**  
**FORMER STERNS & FOSTER PROPERTY**  
**200 SHEPHERD AVENUE**  
**LOCKLAND, OHIO**

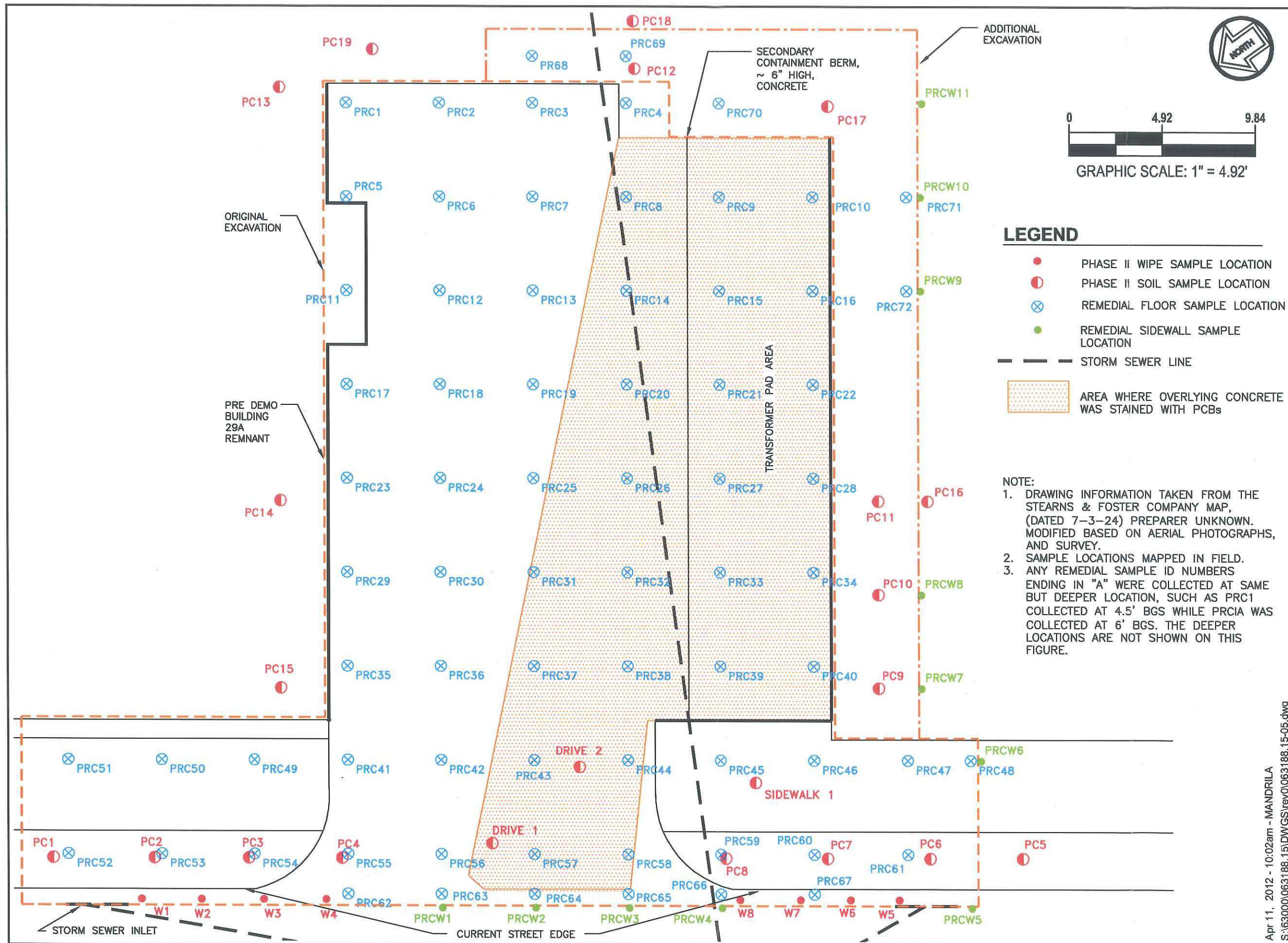
Date	04-12-12
Drawn By	GM
Designed By	KE
Scale	1" = 4.92'
Project	063188.15



Apr 12, 2012 - 5:43pm - MANDRILA  
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Figure No. 5





**LEGEND**

- PHASE II WIPE SAMPLE LOCATION
- PHASE II SOIL SAMPLE LOCATION
- ⊗ REMEDIAL FLOOR SAMPLE LOCATION
- REMEDIAL SIDEWALL SAMPLE LOCATION
- STORM SEWER LINE
- ▨ AREA WHERE OVERLYING CONCRETE WAS STAINED WITH PCBs

**NOTE:**

1. DRAWING INFORMATION TAKEN FROM THE STEARNS & FOSTER COMPANY MAP, (DATED 7-3-24) PREPARER UNKNOWN. MODIFIED BASED ON AERIAL PHOTOGRAPHS, AND SURVEY.
2. SAMPLE LOCATIONS MAPPED IN FIELD.
3. ANY REMEDIAL SAMPLE ID NUMBERS ENDING IN "A" WERE COLLECTED AT SAME BUT DEEPER LOCATION, SUCH AS PRC1 COLLECTED AT 4.5' BGS WHILE PRC1A WAS COLLECTED AT 6' BGS. THE DEEPER LOCATIONS ARE NOT SHOWN ON THIS FIGURE.

Revision Date											
No.											

**PCB REMEDIAL AREA**  
**FORMER STERNS & FOSTER PROPERTY**  
**200 SHEPHERD AVENUE**  
**LOCKLAND, OHIO**

Date	04-11-12	Drawn By	GM	Designed By	KE	Scale	1" = 4.92'	Project	063188.15
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Indiana  
Michigan  
Ohio

**sme**  
www.sme-usa.com

Apr 11, 2012 - 10:02am - MANDRILA  
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Figure No. 6

**TABLES**

*Table 1 –Initial PCB Results*

*Table 2 – Phase II Property Assessment Soil Sample Results*

*Table 3 – Remaining Soil in PCB Release Area*

**Table 1**  
**Initial PCB Results**  
**August 31, 2011 Release**

Direction of Flow	Location/Area	Sample	Matrix	Units	Total PCBs	Ohio VAP Direct Contact Standard	Aquatic Screening Level	761.61 Standards	Comment	
↓	Storm Sewer	Manway 1	Wipe <sup>a</sup>	mg <sup>a</sup>	3.2	Not Applicable	Not Applicable	Not Applicable	Manhole near transformers, wipe of concrete and sheen.	
	Storm Sewer	Manway 2	Wipe <sup>a</sup>	mg <sup>a</sup>	1.0				140' from Manway 1, wipe of sheen.	
	Storm Sewer	Manway 3	Wipe <sup>a</sup>	mg <sup>a</sup>	2.2				190' from Manway 2, wipe of sheen.	
	Storm Sewer	Manway 4	Wipe <sup>a</sup>	mg <sup>a</sup>	0.05				158' from Manway 3, wipe of sheen.	
	Storm Sewer Gully <sup>c</sup>	Ditch 1	Soil	mg/Kg	15	18		1 (high-occupancy area) 25 (low-occupany area)	Mouth of storm sewer where it enters ditch.	
	Storm Sewer Gully <sup>c</sup>	Ditch 2	Soil	mg/Kg	18				Mid point of ditch.	
	Storm Sewer Gully <sup>c</sup>	Ditch 3	Soil	mg/Kg	25				Ditch where it enters pipe (storm sewer)	
	Storm Sewer	Outfall Wipe 1	Wipe <sup>b</sup>	mg/100 cm <sup>2</sup>	0.0041	Not Applicable		Not Applicable	Lip of Stearns and Foster outfall above creek.	
	QA Sample	Outfall Wipe 2	Wipe	mg	<0.001				Wipe Blank.	
↓	Mill Creek	USPT 2	Sediment	mg/kg	<0.16	18	0.0598	1 (high-occupancy area) 25 (low-occupany area)	Sediment approximately 1 mile upstream of Stearns and Foster outfall at confluence of tributary from GE and Mill Creek. Adjacent to Pristine Superfund site.	
	Mill Creek	USPT 1	Sediment	mg/kg	<0.15				Sediment approximately 4,973' upstream of Stearns and Foster outfall, adjacent to Pristine Superfund site.	
	Mill Creek	EOF 3	Sediment	mg/kg	0.3				Sediment below an outfall found on east bank, approximately 1,425' upstream of Stearns and Foster outfall.	
	Mill Creek	EOF 2	Sediment	mg/kg	<0.17				Sediment below an outfall found on east bank, approximately 478' upstream of Stearns and Foster outfall.	
	Mill Creek	EOF 1	Sediment	mg/kg	0.27				Sediment below an outfall found on east bank, approximately 230' upstream of Stearns and Foster outfall.	
	Mill Creek	US 2	Sediment	mg/kg	0.55				Sediment 200' upstream from Stearns and Foster outfall.	
	Mill Creek	US 1	Sediment	mg/kg	0.37				Sediment 100' upstream from Stearns and Foster outfall.	
	Outfall	Mill Creek	Outfall Creek Sed 1	Sediment	mg/kg				0.17	Sediment at base of Stearns and Foster outfall on west bank of creek.
		Mill Creek	OF 1	Sediment	mg/kg				<0.17	Sediment in middle of creek at Stearns and Foster outfall.
	↓	Mill Creek	Outfall Creek Sed 2	Sediment	mg/kg				0.38	Sediment approximately 10' downstream from Stearns and Foster outfall.
		Mill Creek	DS 3	Sediment	mg/kg				<0.14	Sediment 30' downstream from Stearns and Foster outfall, middle of creek.
		Mill Creek	DS 2	Sediment	mg/kg				<0.14	Sediment 30' downstream from Stearns and Foster outfall, 5' from west bank.
		Mill Creek	DS 1	Sediment	mg/kg				<0.14	Sediment 130' downstream from Stearns and Foster outfall, 5' from west bank.
↓	Mill Creek	Upstream	Surface Water	mg/L	<0.00051	Not Applicable	0.00012	Not Applicable	100' upstream from Stearns and Foster outfall.	
	Storm Sewer Water	Outfall Water	Water	mg/L	0.0011		Not Applicable	0.003	As it discharges from the Stearns and Foster outfall.	
	Mill Creek	Stream Outfall	Surface Water	mg/L	<0.00051		0.00012	Not Applicable	Surface water at base of Stearns and Foster outfall.	

<sup>a</sup> No specific wipe area was used due to access issues.

<sup>b</sup> Sampled area was approximately 100 cm<sup>2</sup>.

<sup>c</sup> The storm sewer outfalls to a ditch at the end of which is a concrete retainment with a pipe in the bottom. This pipe is the final outfall to the creek. The stormwater flows through sewers on the Property exiting the Property at Manway 4. The water then flows through the sewers of the adjoining property where it discharges to the ditch. It flows through the ditch to the pipe which discharges to the creek.

Detected results in bold

< - Not detected at listed detection limit.



Table 2  
Phase II Property Assessment Soil Sample Results  
Former Stearns and Foster Property

PCB	Hazard Risk	Cancer Risk	Sample Depth	1:Sidewalk 1 2.5'	2:Drive 1 (0.5'-2')	3:Drive 2 (0.5'-2')	PC1 (0.5'-2')	PC2 (0.5'-2')	PC3 (0.5'-2')	PC4 (0.5'-2')
Aroclor 1016	18	26		<3.0	<2.6	<6.4	<0.14	<0.14	<0.15	<29
Aroclor 1221	18	26		<5.9	<5.3	<13	<0.28	<0.28	<0.29	<59
Aroclor 1232	18	26		<3.0	<2.6	<6.4	<0.14	<0.14	<0.15	<29
Aroclor 1242	18	26		<3.0	<2.6	<6.4	<0.14	<0.14	<0.15	<29
Aroclor 1248	18	26		<3.0	<2.6	<6.4	<0.14	<0.14	<0.15	<29
Aroclor 1254	18	26		<3.0	<2.6	<6.4	<0.14	<0.14	<0.15	<29
Aroclor 1260	18	26		150	200	390	<0.14	<0.14	8.5	1000

Results in mg/Kg

< - Not detected at listed detection limit

Detected results in BOLD

Shaded results exceed one or more standards

Table 2  
Phase II Property Assessment Soil Sample Results  
Former Stearns and Foster Property

PCB	Hazard Risk	Cancer Risk	Sample	PC5	PC6	PC7	PC8	PC9	PC10	PC11
			Depth	(0.5'-2')	(0.5'-2')	(0.5'-2')	(0.5'-2')	(0.5'-2')	(0.5'-2')	(0.5'-2')
Aroclor 1016	18	26		<0.14	<0.15	<0.14	<15	<0.1	<0.1	<0.099
Aroclor 1221	18	26		<0.29	<0.29	<0.28	<30	<0.2	<0.2	<0.2
Aroclor 1232	18	26		<0.14	<0.15	<0.14	<15	<0.1	<0.1	<0.099
Aroclor 1242	18	26		<0.14	<0.15	<0.14	<15	<0.1	<0.1	<0.099
Aroclor 1248	18	26		<0.14	<0.15	<0.14	<15	<0.1	<0.1	<0.099
Aroclor 1254	18	26		<0.14	<0.15	<0.14	<15	<0.1	<0.1	<0.099
Aroclor 1260	18	26		0.66	<0.15	0.34	54	24	4.9	18

Results in mg/Kg

< - Not detected at listed detection limit

Detected results in BOLD

Shaded results exceed one or more standards

Table 2  
Phase II Property Assessment Soil Sample Results  
Former Stearns and Foster Property

PCB	Hazard Risk	Cancer Risk	Sample Depth	PC12 (0.5'-2')	PC13 (0.5'-2')	PC14 (0.5'-2')	PC15 (0.5'-2')	PC16 (0.5'-2')	PC17 (0.5'-2')	PC18 (0.5'-2')	PC19 (0.5'-2')
Aroclor 1016	18	26		<0.1	<0.1	<0.1	<0.1	<0.13	<0.13	<0.11	<0.12
Aroclor 1221	18	26		<0.2	<0.2	<0.2	<0.2	<0.26	<0.26	<0.22	<0.24
Aroclor 1232	18	26		<0.1	<0.1	<0.1	<0.1	<0.13	<0.13	<0.11	<0.12
Aroclor 1242	18	26		<0.1	<0.1	<0.1	<0.1	<0.13	<0.13	<0.11	<0.12
Aroclor 1248	18	26		<0.1	<0.1	<0.1	<0.1	<0.13	<0.13	<0.11	<0.12
Aroclor 1254	18	26		<0.1	<0.1	<0.1	<0.1	<0.13	<0.13	<0.11	<0.12
Aroclor 1260	18	26		45	<0.1	0.52	1.4	<0.13	2.5	<0.11	0.37

Results in mg/Kg  
< - Not detected at listed detection limit  
Detected results in BOLD  
Shaded results exceed one or more standards

Table 3  
Remaining Soil in PCB Release Area  
Former Stearns and Foster Property

Sample	Result	Depth	Sample	Result	Depth	Comment
PRC1A	6.0	6	PRC47	1.1	4.5	
PRC2	5.1	4.5	PRC48	19	4.5	
PRC3A	0.06	6	PRC46	16	4.5	
PRC4A	0.06	6	PRC49	0.66	4.5	
PRC5	3.9	4.5	PRC50	0.06	4.5	
PRC6	6.8	4.5	PRC51	0.065	4.5	
PRC7	7.1	4.5	PRC52	0.6	4.5	
PRC8A	0.06	6	PRC53	0.06	4.5	
PRC9	12.0	4.5	PRC54	0.06	4.5	
PRC10A	0.06	6	PRC55A	0.06	6	
PRC11	4.4	4.5	PRC56	9.1	4.5	
PRC12	2.4	4.5	PRC57A	0.06	6	
PRC13	5.7	4.5	PRC58A	0.06	6	
PRC14A	0.06	6	PRC59	4.4	4.5	
PRC15A	0.9	6	PRC60	2.1	4.5	
PRC16A	0.06	6	PRC61	0.44	4.5	
PRC17	8.3	4.5	PRC62	0.85	2.5	
PRC18	2.3	4.5	PRC63A	7.8	5	
PRC19	3.5	4.5	PRC64	5.2	2.5	
PRC20	0.065	4.5	PRC65A	0.06	5	
PRC21	0.06	4.5	PRC66A	0.13	5	
PRC22	9	4.5	PRC67	2.2	2.5	
PRC23A	0.06	6	PRC68	0.06	4.5	
PRC24	0.22	4.5	PRC69	0.06	4.5	
PRC25	19	4.5	PRC70	0.06	4.5	
PRC26	0.42	4.5	PRC71	0.19	4.5	
PRC27	8.3	4.5	PRC72	0.06	4.5	
PRC28A	0.06	6	PRCW1	0.06	2.5	Sidewall samples for TSCA. These sidewall samples are off-Property.
PRC29	18	4.5	PRCW2	0.06	2.5	
PRC30A	0.06	6	PRCW3	0.06	2.5	
PRC31	0.17	4.5	PRCW4	0.25	2.5	
PRC32	3.3	4.5	PRCW5	0.06	1	Sidewall samples for the VAP.
PRC33	1.9	4.5	PRCW6	0.06	1	
PRC34A	0.06	6	PRCW8	0.06	1	
PRC35A	0.06	6	PRCW9	0.06	1	
PRC36	7.0	4.5	PRCW10	0.06	1	
PRC37	1.1	4.5	PRCW11	0.06	1	
PRC38	0.37	4.5	PC5	0.66	2	Phase II samples to define impact.
PRC39A	0.06	6	PC10	4.9	2	
PRC40A	0.06	6	PC13	0.05	2	
PRC41	24	4.5	PC14	0.52	2	
PRC42	9.8	4.5	PC15	1.4	2	
PRC43	17	4.5	PC16	0.065	2	
PRC44A	0.06	6	PC17	2.5	2	
PRC45	6.8	4.5	PC18	0.055	2	
Results in mg/kg Detected results in <b>BOLD</b> NDs shown at 1/2 the detection level. Depth is feet below ground surface.			PC19	0.37	2	
			Count	136		
			Minimum	0.05		
			Mean	3.7		
			Maximum	24		Soil removed but no additional sample collected
			Standard Deviation	4.3		
			95% UCL	5.4		Determined by ProUCL